

REMARKS

Claim 1 has been amended to recite in step (1), "forming a solution of an amino compound (V) from a mixture of an amino compound and an alkanol hemiacetal in a solvent". Recitation of amino compound (I) in step (1) and the definition of amino compound (I) have been deleted, and replaced with recitation of amino compound (V) and its definition. Also as amended, step (3) recites "depositing amino compound (V) as a resin...". Support for the amendments is found in the Specification at, for example, paragraphs 9-18, 27-32, and 39 (lines 1-3); and original claims 1 and 3. See *In re Gardner*, 177 USPQ 396, 397 (CCPA 1973); and MPEP §§ 608.01(o) and (l).

Claims 2 and 3 are cancelled, without prejudice.

Claim 4 has been amended to revise the dependency to that of claim 1 and to recite that "the solvent in step (1) is water." Support for the amendments is found in the Specification at, for example, paragraphs 25, 22 and 27.

Claim 5 has been amended to change the dependency to that of claim 1. Support for the amendment is found in the Specification at, for example, paragraphs 20, 22, 26, and 27; and in original claims 5 and 3. (Id.)

Claim 14 has been added, support for which is found in the Specification at, for example, paragraph 33, line 3, and Example 1 (paragraph 53).

It is submitted that no new matter has been presented.

Claim 1 has been amended in part because subsequent to the filing of the present application, an evaluation was made of the performance of the use of glyoxylic acid in about the same molar ratio as and in place of methyl glyoxylate in the procedure for forming capsules disclosed in Example 1 of the Specification. The results suggest

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that the use of glyoxylic acid in the procedure of Example 1 would not be suitable for commercial use. Hence, claim 1 has been amended to recite, *inter alia*, forming a solution of an amino compound (V) from a mixture of an amino compound and an alkanol hemiacetal in a solvent. As can be seen, amino compound (V) has an ester end group, COOR₄. Acids (and other non-ester EWG's) are thus omitted. As we are prosecuting the ester-related subject matter, we believe that it is not necessary to submit the results of the evaluation using an aldehyde having an acid end group (glyoxylic acid) as a starting material. If the Examiner deems otherwise, however, the results will be provided.

Anticipation Rejection

Claims 1, 2, and 4 were rejected under 35 U.S.C. § 102(b) as being anticipated by Rätzsch et al., WO 02/28261 ("Rätzsch"). (Paper No. 20081125 at 2.) We believe that the Examiner intended to identify Rätzsch et al., WO 02/48261. Clarification is requested. All references to Rätzsch are to the published U.S. National Stage filing of the International Application which is an English language document, i.e., U.S. Publication No. 2005/0020750. (Id.)

Rätzsch discloses a method for curing aminoplast resins in which inorganic particles, which have a laminated structure and which comprise interlamellar exchangeable cations of the following type: alkali cations, alkaline-earth cations, aluminum cations, iron cations and/or manganese cations, are used as curing agents. (Abstract, lines 1-6.) Rätzsch also discloses that "[t]he invention also relates to

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aminoplast resins cured in such a manner, to [provide] semi-finished products and ... molding materials." (Abstract, lines 6-8.)

In making the rejection, the Examiner asserted with regard to claims 1 and 4, that Rätzsch "disclose aminoplast resins [0002]. Such resins include polycondensates of melamine derivatives and aldehydes, such as furfural (which appears to be mistakenly identified as "furfurol"), glyoxal, and glutaraldehyde [0014]." (Paper No. 20081125 at 2.) The Examiner concluded that "[t]hese condensates would form a compound conforming to Applicant's formula (I)." (Id.)

The Examiner also asserted that "Rätzsch uses the resins to make microcapsules [0012]. The process to make the microcapsules includes adding the precondensates into an aqueous dispersion of a "core former", curing and then drying the microcapsules [0044]." (Id.)

Regarding claim 2, the Examiner asserted that Rätzsch discloses that "[g]lyoxal and glutaraldehyde provide an aldehyde-group as the EWG." (Id.)

Initially, it is noted that to forward prosecution, claim 1 has been amended to recite as step (1), "forming a solution of an amino compound (V) from a mixture of an amino compound and an alkanol hemiacetal in a solvent". Also, the structure of amino compound (V) is provided in amended claim 1. And, step (3) as amended recites "depositing amino compound (V) as a resin....".

Claim 2 has been deleted without prejudice. Therefore, the rejection as to claim 2 should be removed.

As is well settled, anticipation requires "identity of invention." *Glaverbel Societe Anonyme v. Northlake Mktg. & Supply*, 33 USPQ2d 1496, 1498 (Fed.

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Cir. 1995). Each and every element recited in a claim must be found in a single prior art reference and arranged as in the claim. *In re Marshall*, 198 USPQ 344, 346 (CCPA 1978); *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Co.* 221 USPQ 481, 485 (Fed. Cir 1984).

Regarding the melamine resins, Rätzsch discloses that “[p]referred melamine resins are polycondensates of melamine derivatives and C₁-C₁₀-aldehydes ... and the partial etherification products thereof with C₁-C₁₀-alcohols...”. (Paragraph 14, lines 1-5.) The Examiner acknowledged that “Rätzsch is silent ... with regard to an aldehyde having an acid or ester endgroup (e.g. glyoxylic acid).” (Id. at 3.) Accordingly, Rätzsch lacks disclosure of a process for forming capsules comprising, *inter alia*, forming a solution of an amino compound (V) from a mixture of an amino compound and an alkanol hemiacetal in a solvent, wherein amino compound (V) is as shown in amended claim 1. As can be seen, amino compound (V) of amended claim 1 has an ester end group, COOR₄. Rätzsch, however, has no disclosure of using an aldehyde with an ester end group as a starting material, and accordingly, there is no disclosure of depositing an amino compound having an ester end group, COOR₄, as a resin upon the surface of the core material to form capsules. For these reasons, Rätzsch does not disclose each and every element of amended claim 1.

In view of the foregoing, the anticipation rejection has been rendered moot. Reconsideration and withdrawal of the rejection are respectfully requested.

Obviousness Rejections

1. Rätzsch as Evidenced by Scott, Mohrman, Ebel, Albrecht, or Koike

Claims 3 and 5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rätzsch as evidenced by Scott, U.S. Patent No. 2,456,567 ("Scott"), Mohrman et al., U.S. Patent No. 2,485,059 ("Mohrman"), Ebel et al., U.S. Patent No. U.S. 4,888,412 ("Ebel"), Albrecht et al., U.S. Patent No. 5,891,983 ("Albrecht"), or Koike et al., U.S. Patent No. 2002/0025481 ("Koike").

Rätzsch is summarized above.

Scott discloses "forming an aqueous solution of a reaction product of ammeline and an aldehyde, [and] then precipitating said reaction product by the addition of a water-soluble compound of a metal...". (Col. 1, lines 12-18.) Scott also discloses depositing the water-insoluble metal salts of ammeline-aldehyde reaction products onto fibrous materials. (Col. 1, lines 1-4.)

Mohrman discloses "solid aminotriazine-aldehyde reaction products soluble in all proportions in water at ordinary temperatures." (Col. 1, lines 10-13.) Mohrman also discloses that "[a]queous solutions of these products are particularly valuable as coating and/or impregnating materials for cloth, paper, metal, wood and the like, as intermediates in preparing etherified resins, e.g., alkylated resins, as adhesives, e.g., for plywood, in preparing molding compositions, etc." (Col. 6, line 71 – Col. 7, line 2.)

Ebel discloses that "[a] tanning assistant useful in particular for tanning in combination with aluminum tanning agents is obtained by condensing melamine with glyoxal and/or glyoxylic acid and optionally with an aromatic compound which has a

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phenolic hydroxyl group or optionally with a condensable nitrogen compound."

(Abstract.) Ebel further discloses "a process for tanning leather in an aqueous liquor by treating a pickled pelt with a condensation product of melamine and glyoxal and/or glyoxylic acid, if desired in the form of an alkali metal salt...". (Col. 1, lines 55-59.)

Albrecht discloses "[w]ater-soluble formaldehyde-free polycondensation products based on amino-s-triazines with at least two amino groups and glyoxylic acid, which contain as [a] further component at least one amino compound..." (Abstract, lines 1-4.) Albrecht also discloses that "[t]hese polycondensation products are ... suited as additives for aqueous suspensions of inorganic binders, especially cement, lime and gypsum. Building material mixtures which contain these polycondensation products remain workable for a considerably [long] time and, ... also set more quickly." (Abstract.)

Koike discloses a color filter which is capable of forming a pattern using an alkaline developer...". (Abstract, lines 1-2.) Koike also discloses that "[t]he color filter comprises a transparent substrate and a pixel formed on the transparent substrate, wherein the pixel is made of a coating film of a curable colored composition containing (a) a coloring material, (b) a compound having a photopolymerizable functional group and (c) an amino resin having a carboxyl group and/or a phenolic hydroxyl group and the coating layer is photocured, followed by heat curing." (Abstract, lines 4-11.) Koike further discloses that the color filter may be "used in color liquid crystal displays, color scanners and solid image pick-up elements, and, more particularly, to a color filter having excellent durability, suitable for uses which require durability after passing

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through the step of forming a pattern by means of exposure and development."

(Paragraph 2.)

In making the rejection, the Examiner asserted with regard to claim 3 that "Rätzsch discloses a process of making microcapsules from the condensation products of melamine derivatives and C₁-C₁₀ aldehydes as previously explained." (Paper No. 20081125 at 3.)

The Examiner acknowledged, as noted above, that "Rätzsch is silent, however, with regard to an aldehyde having an acid or ester endgroup (e.g. glyoxylic acid)." (Id.)

The Examiner further asserted:

Acid-containing aldehydes such as glyoxylic acid were well-known as functional equivalents for the non-limiting exemplary aldehydes disclosed by Rätzsch: they were aldehydes known to successfully undergo a condensation reaction with melamine and its derivatives. As evidence the examiner provides several references to this effect. Scott discloses coatings produced from ammeline-aldehyde condensation products, wherein the aldehydes include glyoxal and glyoxylic aldehyde (i.e. glyoxylic acid) (col 3 ln 23-36). Mohrman discloses the interchangeability of various aldehydes, including glyoxylic aldehyde and glyoxal, in melamine condensation reactions (col 5 ln 14-22). Albrecht discloses triazine condensation products with glyoxylic acid to produce formaldehyde-free products (col 2 ln 25-33). Ebel discloses a condensation product of melamine and glyoxal or glyoxylic acid (col 1 ln 46-54). Koike discloses the condensation of a glyoxylate and melamine [0044]. (Id.)

The Examiner concluded that "[a]t the time of the invention, it would have been obvious to one of ordinary skill in the art to use glyoxylic acid as the aldehyde of Rätzsch's invention because it was a known functional equivalent to Rätzsch's

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exemplary aldehydes with a reasonable expectation of success at forming the encapsulating material described by Rätzsch.” (Id.)

With regard to claim 5, the Examiner asserted that “[t]he ratio of melamine derivative to aldehyde ranges from 1: 1 to 1:6 [0014].” (Id.)

As noted above, to forward prosecution, claim 1 has been amended to recite as step (1), “forming a solution of an amino compound (V) from a mixture of an amino compound and an alkanol hemiacetal in a solvent”. Also, the structure of amino compound (V) is provided in amended claim 1. And, step (3) as amended recites “depositing amino compound (V) as a resin...”.

Also, claim 5 has been amended to revise the dependency to that of claim 1.

It is well settled the Examiner bears the burden to set forth a *prima facie* case of unpatentability. *In re Glaug*, 62 USPQ2d 1151, 1152 (Fed. Cir. 2002); *In re Oetiker*, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); and *In re Piasecki*, 223 USPQ 785, 788 (Fed. Cir. 1984). If the PTO fails to meet its burden, then the applicant is entitled to a patent. *In re Glaug*, 62 USPQ2d at 1152.

When patentability turns on the question of obviousness, as here, the search for and analysis of the prior art by the PTO should include evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and modify the document(s) relied on by the Examiner as evidence of obviousness. *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1731-32 (2007) (the obviousness “**analysis should be made explicit**” and the teaching-suggestion-motivation test is “**a helpful insight**” for determining obviousness) (emphasis added); *McGinley v. Franklin Sports*, 60

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USPQ2d 1001, 1008 (Fed. Cir. 2001). Moreover, the factual inquiry whether to modify document(s) must be thorough and searching. And, as is well settled, the teaching, motivation, or suggestion test "***must be based on objective evidence of record.***" *In re Lee*, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002) (emphasis added). See also *Examination Guidelines for Determining Obviousness*, 72 Fed. Reg. 57526, 57528 (October 10, 2007) ("The key to supporting any rejection under 35 USC § 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious.").

Respectfully, we submit that the rejection is devoid of a proper § 103 analysis in support of the proposed modification. All that is there are conclusory statements such as the assertion that "[a]cid-containing aldehydes such as glyoxylic acid were well-known as functional equivalents for the non-limiting exemplary aldehydes disclosed by Rätzsch; they were aldehydes known to successfully undergo a condensation reaction with melamine and its derivatives....[I]t would have been obvious to one of ordinary skill in the art to use glyoxylic acid as the aldehyde of Rätzsch's invention because it was a known functional equivalent to Rätzsch's exemplary aldehydes with a reasonable expectation of success at forming the encapsulating material described by Rätzsch." (Paper No. 20081125 at 3.) Moreover, these statements are inapplicable to amended claim 1, which recites, *inter alia*, forming a solution of an amino compound (V) from a mixture of an amino compound and an alkanol hemiacetal in a solvent, and wherein amino compound (V) includes an ester end group, COOR₄. The Examiner has made no assertions regarding the subject matter of amended claim 1, and therefore, the rejection is improper and should be withdrawn.

Here, what the rejection should have done, but did not, was to explain on the record **why** one skilled in this art would modify the disclosure of Rätzsch in the manner implied by the Examiner, as the Examiner made no explicit proposal to modify as noted above, to arrive at the process for forming capsules of amended claim 1. As is well settled, an Examiner cannot establish obviousness by locating documents which describe various aspects of a patent applicant's invention without also providing evidence of the motivating force which would impel one skilled in the art to do what the patent applicant has done. *Takeda Chem. Indus., Ltd v. Alphapharm Pty., Ltd.*, 492 F.3d 1350, 1357 (Fed. Cir. June 28, 2007) (citing *KSR*) (indicating that "it remains necessary to identify **some reason** that would have led a chemist to modify a known compound in a particular manner to establish prima facie obviousness of a new claimed compound") (emphasis added); *Ex parte Levengood*, 28 USPQ2d 1300, 1301-02 (BPAI 1993). But this is precisely what the Examiner has done here. Thus, the rejection is legally deficient and should be withdrawn for this reason alone.

Beyond looking at the cited documents to determine if any of them suggests doing what the inventors have done, one must also consider if the art provides the required expectation of succeeding in that endeavor. See *In re Dow Chem. Co. v. American Cyanamid Co.*, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988). "Obviousness does not require absolute predictability, but a reasonable expectation of success is necessary." *In re Clinton*, 188 USPQ 365, 367 (CCPA 1976). Furthermore, the U.S. Patent and Trademark Office Examination Guidelines at page 57527 provide the following guidance to Examiners: "In short, the focus when making a determination of obviousness should be on what a person of ordinary skill in the pertinent art would have

known at the time of the invention, and on what such a person would have reasonably expected to have been able to do in view of that knowledge". However, no such motivation or expectation of success can be found in the cited documents.

As noted above in response to the anticipation rejection, Rätzsch discloses that “[p]referred melamine resins are polycondensates of melamine derivatives and C₁-C₁₀-aldehydes ... and the partial etherification products thereof with C₁-C₁₀-alcohols...”. (Paragraph 14, lines 1-5.) The Examiner acknowledged that “**Rätzsch is silent ... with regard to an aldehyde having an acid or ester endgroup** (e.g. glyoxylic acid).” (Id. at 3) (emphasis added.) Rätzsch provides no teaching, suggestion, or motivation to use an aldehyde having an ester end group to achieve a process for forming capsules comprising, *inter alia*, forming a solution of an amino compound (V) from a mixture of an amino compound and an alkanol hemiacetal in a solvent, wherein amino compound (V) has an ester end group, COOR₄.

Furthermore, Rätzsch discloses that “[i]t has been surprisingly found that aminoplasts having high toughness and strength can be prepared by using **curing agents comprising inorganic particles having a layer structure which have an interlamellar content of exchangeable cations.**” (Paragraph 9) (emphasis added.) With regard to the **process** of making “semifinished products and moldings”, Rätzsch discloses methods using “mixtures of aminoplast precondensates and, as a curing agent, from 1 to 30% by mass, based on the aminoplast precondensates, of inorganic particles having a layer structure which have an interlamellar content of exchangeable cations ... **in the form of aqueous dispersions or emulsions having a solids content** of from 30 to 80% by mass, which may optionally contain up to 50% by mass of

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C₁-C₈-alcohols, from 0.1 to 5% by mass of polymeric dispersants and from 0.01 to 3% by mass detergents..." (Id. at Paragraph 41) (emphasis added). It is this material, according to the disclosure of Rätzsch, that is "processed by *introduction into an emulsifier-free aqueous dispersion* of solid or liquid capsule core formers, curing and spray-drying to give microcapsules..." (Paragraphs 44 and 41.) Rätzsch further discloses that "[t]he production of microcapsules is effected by introduction of the aminoplast precondensates into an emulsifier-free aqueous dispersion of solid or liquid capsule core formers and inorganic particles having a layer structure, which have an interlamellar content of exchangeable cations ..., as a curing agent, [followed by] curing and spray-drying." (Paragraph 60, lines 1-8.)

Thus, Rätzsch discloses that the "inorganic particles having a layer structure which have an interlamellar content of exchangeable cations" are a required feature of the curing agent. Rätzsch discloses that in the process of making microcapsules, a dispersion or emulsion is produced including the inorganic particles having a layer structure, i.e., a solids content. *The curing agent of Rätzsch is an aqueous dispersion or emulsion having a solids content.* In no way does Rätzsch suggest or provide motivation for the claimed process which recites as step (1), "forming a **solution** of an amino compound (V) from a mixture of an amino compound and an alkanol hemiacetal in a solvent."

Rätzsch also discloses that aminoplast precondensates and a curing agent comprising inorganic particles having a layer structure in the form of aqueous dispersions or emulsions having a solids content are processed by introduction into an emulsifier-free aqueous dispersion of solid or liquid capsule core formers, i.e., core

material, as disclosed in paragraph 60 of Rätzsch. It is observed, therefore, that in no way does Rätzsch teach, suggest, or provide motivation for the claimed process which comprises as recited step (2), "forming a dispersion of a core material *in the solution*", where "the solution" refers to the solution of an amino compound (V) formed as recited in step (1).

In many respects, the claimed process is contrary to Rätzsch. Rätzsch discloses the use of "curing agents comprising inorganic particles having a layer structure which have an interlamellar content of exchangeable cations to produce "aminoplasts having high toughness and strength...". (Paragraph 9.) One skilled in the art would not have been led to the elegant process in accordance with the present claims, in view of the high-strength aminoplast curing of Rätzsch. Moreover, returning to consideration of the melamine resins used, we note that one skilled in the art would know that an aldehyde having an ester end group is not as stable in a water soluble system as would be other aldehydes. Yet, the claimed process uses an aldehyde having an ester group as a starting material.

Also, as noted above, Rätzsch provides no suggestion of using an aldehyde having an ester end group. In view of Rätzsch, one skilled in the art would not have been motivated to nor have predicted success in a process for forming capsules comprising the steps of: (1) forming a solution of an amino compound (V) from a mixture of an amino compound and an alkanol hemiacetal in a solvent; (2) forming a dispersion of a core material in the solution; (3) depositing ***amino compound (V)*** as a resin upon the surface of the core material to form capsules; etc., as recited in amended claim 1.

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It is submitted that Rätzsch, whether alone or in consideration of the other documents cited by the Examiner as evidence, does not create a *prima facie* case of patentability. Moreover, the documents cited by the Examiner as "evidence" cannot cure the fact that Rätzsch simply does not render obvious the present claims.

With regard to Scott, Mohrman, and Ebel, the Examiner has asserted only that each of the listed documents discloses interchangeability of various aldehydes with acids, e.g., glyoxylic acid. Initially, we note that the Examiner has made no assertions, however, that any of these documents discloses or suggests any interchangeability of aldehydes of Rätzsch with any esters. Thus, the purported "evidence" is not relevant to the aldehyde having an ester end group in accordance with the present claims.

Furthermore, each of Scott, Mohrman, and Ebel, disclose the preparation and use of resins as coatings. None of these documents discloses or suggests forming encapsulated products.

Albrecht discloses the use of the polycondensation products as additives for aqueous suspension, e.g., in forming cement. Aqueous suspensions of inorganic binders ... form "building material mixtures" that have "a better plasticizing effect and the flow properties of the building material mixtures made in this way can be maintained for a greater length of time. (Col. 2, lines 43-47.) Also, "the building material mixtures harden more rapidly." (Col 2, lines 47-49.) As such, Albrecht discloses the use of a resin to adhere particles together. There is no disclosure or suggestion of encapsulating.

It is submitted that each of these documents should be withdrawn with regard to the amended claims. In any event, contrary to the assertions of the Examiner,

neither Scott, Mohrman, Ebel, nor Albrecht provide any evidence or other reason to support obviousness of the amended claims in view of Rätzsch.

Koike discloses a coating film comprising an amino resin which is used to provide a color filter capable of forming a pattern using an alkaline developer. To prepare the amino resin, Koike discloses "a method of adding at least one aldehyde compound [such as glyoxylic acid], to an alcohol for etherification, and adding at least one amino compound [such as melamine], thereby ***carrying out the condensation reaction and etherification reaction.***" (Paragraph 44) (emphasis added.) Koike also disclose that "***the alcohol for etherification is mainly useful to stabilize the condensation reaction product*** made from the amino compound and the aldehyde compound as the raw material." (Paragraph 36, lines 1-4) (emphasis added.) The etherification reaction is used to stabilize the condensation reaction such that in the end products, e.g., printed circuits and electronics, non-cross-linked areas can be removed with alkaline solution, i.e., the developer. (See, e.g., paragraph 2; paragraph 35, lines 11-15; paragraph 36, lines 1-4; paragraph 37; paragraph 65; and paragraph 70.) Koike is concerned with the etherification reaction of the condensation reaction product in relation to its disclosed color filter which is capable of forming a pattern using an alkaline developer.

First, as noted above, the Examiner has made no assertion that an aldehyde having an ester end group would be interchangeable with an aldehyde as disclosed by Rätzsch. Furthermore, Koike fails to provide any evidence of any implied interchangeability. Koike is concerned with coatings, and the etherification of the condensation product is Koike's concern in the preparation of its disclosed color pixel. It

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strains credulity to imply that Koike's disclosed reaction, which accomplishes both condensation and etherification, somehow evidences that Rätzsch's aldehyde could be replaced by glyoxalate in the claimed process. The Examiner has provided no reasonable explanation why one skilled in the art would make the leap to consider Koike as providing evidence as suggested by the Examiner.

Furthermore, Koike's coating film used to provide a color filter bears no relation to a process for encapsulation, as presently claimed. Koike does not teach, suggest, or provide motivation for achieving a process for forming capsules, as recited in the amended claims. It is respectfully submitted that Koike should also be removed as cited "evidence".

It is respectfully submitted that the rejection has been rendered moot. Reconsideration and withdrawal of the rejection are requested.

2. Rätzsch in view of Albrecht

Claims 3 and 5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rätzsch in view of Albrecht. (Paper No. 20081125 at 4.)

Rätzsch and Albrecht are summarized above.

In making the rejection with regard to claim 3, the Examiner asserted that "Rätzsch discloses a process of making microcapsules from the condensation products of melamine derivatives and C₁-C₁₀ aldehydes as previously explained." (Id.)

The Examiner acknowledged, however, that "Rätzsch is silent ... with regard to an aldehyde having an acid or ester endgroup (e.g. glyoxylic acid)." (Id.)

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The Examiner also asserted that "Albrecht discloses triazine condensation products with glyoxylic acid to produce formaldehyde-free products (col 2 ln 25-33). Albrecht points out that formaldehyde is a known 'toxicological risk' (col 1 ln 44-50)." (Id.)

The Examiner concluded that "[a]t the time of the invention, it would have been obvious to one of ordinary skill in the art to use glyoxylic acid as the aldehyde of Rätzsch's invention to arrive at a formaldehyde-free product, which would have fewer health risks." (Id.)

With regard to claim 5, the Examiner asserted that "[t]he ratio of melamine derivative to aldehyde ranges from 1: 1 to 1:6 [0014]." (Id.)

As noted above, to forward prosecution, claim 1 has been amended to recite as step (1), "forming a solution of an amino compound (V) from a mixture of an amino compound and an alkanol hemiacetal in a solvent". Also, the structure of amino compound (V) is provided in amended claim 1. And, step (3) as amended recites "depositing amino compound (V) as a resin...".

Also, claim 5 has been amended to revise the dependency to that of claim 1.

All arguments presented above regarding Rätzsch and Albrecht are incorporated here as though presented in full.

It is submitted that Albrecht is not properly combinable with Rätzsch. The Examiner has provided no reasoning as to why one skilled in the art would consider combining Rätzsch with Albrecht which discloses a cement-like building material mixture. Albrecht discloses the use of a resin to adhere particles of the building material mixture

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together. There is no disclosure or suggestion of encapsulating. In addition, as noted above, neither Rätzsch nor Albrecht disclose the use of an aldehyde having an ester end group as a starting material. Moreover, the Examiner made no assertions that ester-containing aldehydes are equivalent to the exemplary aldehydes of Rätzsch. The rejection should fall for each of these reasons alone.

Neither Rätzsch nor Albrecht provide any suggestion or motivation to perform the recited steps of the currently claimed process for forming capsules. As one non-limiting example, as noted above, in no way does Rätzsch suggest or provide motivation for the claimed process which recites as step (1), “*forming a solution* of an amino compound (V) from a mixture of an amino compound and an alkanol hemiacetal in a solvent.” Neither does Albrecht suggest or provide motivation for claimed step (1), also as a non-limiting example. Nor does it fill the gaps in the Examiner’s case as a whole regarding Rätzsch. Clearly, any such proposed combination of documents would not lead one skilled in the art to the claimed process. For each of these reasons, the rejection cannot stand.

Even if the combination of documents were proper, which we assert it is not, one skilled in the art would understand a combination of Rätzsch and Albrecht to provide a curing agent which is a dispersion or an even thicker, e.g., cement-like, material containing solids. Rätzsch and Albrecht would suggest no more than use of a resin material containing a product of an aldehyde with a melamine for use in coating a substrate or as a filler or other building material. Although Albrecht discloses producing “formaldehyde-free products, Albrecht simply does not encapsulate, and one skilled in

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the art would not consider Albrecht's cement-like building material mixture in the context of encapsulating a core material.

In fact, the Examiner's purported combination of documents brings one further from the elegant system of the present claims. Moreover, for one skilled in the art to hypothetically arrive at the claimed process from a combination of these documents would be to modify them in a way that would alter the process/composition in a manner not intended and, in fact, contrary to its teaching. But, as is well settled, to do what the prior art teaches against is the very antithesis of obviousness. See, e.g., *In re Rosenberger*, 156 USPQ 24, 26, (CCPA 1968) and *In re Buehler*, 185 USPQ 781, 787 (CCPA 1975). For this reason also the rejections should be withdrawn.

For each of the foregoing reasons, it is respectfully submitted that the rejection has been rendered moot. Reconsideration and withdrawal of the rejection are requested.

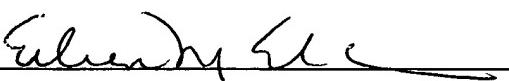
In view of all of the foregoing, entry of the amendments and withdrawal of all outstanding objections and rejections are respectfully requested. It is submitted that the application is in condition for allowance. Issuance of a Notice of Allowance is respectfully requested.

Application No.: 10/560,212

Amendment Dated: April 9, 2009

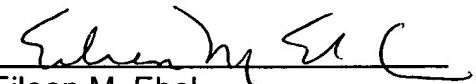
Reply to Office Action Dated: December 10, 2008

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 9, 2008.



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Respectfully submitted,

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